

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-4. (canceled).

5. (currently amended): A peripheral device for a programmable logic controller, comprising:

a processor; and

a memory storing software modules, the software modules comprising:

an instruction table for storing instructions and storing corresponding input/output types of parameters for the instructions;

a search and ~~/~~ determination means for searching the instruction table for an instruction in a code in a portion of a sequence program selected as diversion data from an existing diversion-source sequence program, to determine a corresponding input/output type of a parameter for the instruction;

a search result creating and ~~/~~ storing means for creating and storing a search result table by combining an address in the code in the selected portion of the sequence program, with the determined corresponding input/output type;

a component data creating means for creating a variable data table by replacing the determined corresponding input/output types stored in the search result table with variable names, and for creating component data by adding the corresponding variable names to variables

and to circuit information; and

a component data diversion means for diverting the component data into an arbitrary position in a designated sequence program.

6. (previously presented): The peripheral device for the programmable logic controller according to claim 5, further comprising:

a sequence-program-component storing means for storing into a component storage the created component data as a sequence program component;

a sequence-program-component displaying device for displaying the sequence program components stored in the component storage;

a sequence-program-component selecting means for selecting a desired sequence program component from the sequence program components displayed by the sequence-program-component displaying device; and

a sequence-program-component diversion means for diverting the selected sequence program component into a new sequence program.

7. (currently amended): A program creating method of copying a portion of an existing sequence program and pasting the portion into a new sequence program, for a peripheral device for a programmable logic controller, the method comprising:

a search and /determination step of searching an instruction table for storing instructions and storing corresponding input/output types of parameters for the instructions, for an instruction

in a code in a portion of the sequence program selected as diversion data from an existing diversion-source sequence program, to determine a corresponding input/output type of a parameter for the instruction in the code;

a search result creating and storing step of creating and storing into a memory a search result table by combining the determined corresponding input/output type, with an address in the code in the selected portion of the sequence program;

a component data creating step of creating a variable data table by replacing the determined corresponding input/output types stored in the search result table with variable names, and of creating component data by adding the corresponding variable names to variables and to circuit information; and

a component data diversion step of diverting the component data into an arbitrary position in a new sequence program as a diversion destination.

8. (previously presented): The program creating method according to claim 7, for the peripheral device for the programmable logic controller, the method further comprising:

a sequence-program-component storing step of storing into a component storage the created component data as a sequence program component;

a sequence-program-component displaying step of displaying the sequence program components stored in the component storage;

a sequence-program-component selecting step of selecting a desired sequence program component from the sequence program components displayed in the sequence-program-

component displaying step; and

a sequence-program-component diversion step of diverting into a new sequence program the desired sequence program component that has been selected.

9. (previously presented): The peripheral device for the programmable logic controller according to claim 5, wherein the input/output types of the parameters for the instructions comprise an input type, an output type, and an internal type.

10. (previously presented): The program creating method according to claim 7, for the peripheral device for the programmable logic controller, wherein the input/output types of the parameters for the instructions comprise an input type, an output type, and an internal type.

11. (previously presented): The peripheral device for the programmable logic controller according to claim 5, wherein a user selects the portion of the sequence program from the existing diversion-source sequence program being displayed.

12. (previously presented): The program creating method according to claim 7, for the peripheral device for the programmable logic controller, the method further comprising a user selecting the portion of the sequence program from the existing diversion-source sequence program being displayed.

13. (currently amended): A peripheral device for a programmable logic controller, comprising:

a processor; and

a memory storing software modules, the software modules comprising:

an instruction table that stores instructions and stores corresponding input/output types of parameters for the instructions;

a search and /determination module that searches the instruction table for an instruction in a code in a portion of a sequence program selected as diversion data from an existing diversion-source sequence program, to determine a corresponding input/output type of a parameter for the instruction;

a search result creating and /storing module that creates and stores a search result table by combining an address in the code in the selected portion of the sequence program, with the determined corresponding input/output type;

a component data creating module that creates a variable data table by replacing the determined corresponding input/output types stored in the search result table with variable names, and creates component data by adding the corresponding variable names to variables and to circuit information; and

a component data diversion module that diverts the component data into an arbitrary position in a designated sequence program.

14. (new): The peripheral device for the programmable logic controller according to claim 13, wherein the input/output types stored in the instruction table comprise at least one of an input type, an output type, or an internal type.